

labour free from pain and in a quiet slumber, is to my mind a godsend to her, to her relatives and even to her obstetrician, and is the greatest recommendation that can be given to this form of treatment.

Let me sum up the following conclusions:—

1.—This method is of a simple nature, easily given, and produces no deleterious effects in either mother or babe.

2.—It produces an analgesia throughout the greater part of the second stage in all cases,—in some even to the termination of labour.

3.—It can be used in private practice, but is more suited for hospital cases.

4.—It practically never tends to produce any nausea or vomiting, or intestinal irritation.

5.—In 80 per cent to 90 per cent. of patients the results obtained are satisfactory. However, in a few patients (about 3 per cent.) the effect is unpleasant due to the patient becoming irrational or violent.

REFERENCES

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CANCER OF THE LARYNX*

A Report of the Cases at the Toronto General Hospital, during the Past Five Years

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THAT cancer develops rather frequently in the healthy larynx is known by all close observers of large experience. Fortunately, only occasionally does it develop in the presence of other laryngeal diseases. Since little is known of the cause of this dread malady, and since hope of prevention resides in a knowledge of the cause, we are kept well within the domains of speculation.

This subject was not chosen with the idea of presenting anything new, but just to study the conditions as we find them in a large hospital, and to show why we should exercise greater care and urge upon our fellow practitioners and patients the necessity of early diagnosis, if treatment is to be of avail and disaster avoided. This study is limited to cases, thirty-one in number, which have been admitted to the Toronto General Hospital during the past five years. The histories have been gone over, and observations noted as follows:—

1.—*Etiology.*

(a) *Age.*—The youngest patient was thirty-six years of age, and the oldest, seventy-seven. Fifty-nine per cent. were between the ages of fifty and seventy, and the commonest decade

was from sixty to seventy.

(b) *Sex.*—Of the thirty-one cases twenty-six were males, and five females, that is, eighty-four per cent. male and only sixteen per cent. female.

(c) *Nationality.*—There were eleven Canadians, six English, three Scotch, one Welsh, and one Finnish. Nine were unrecorded.

(d) *Occupation.*—There were six clerks, four wood-workers, one each of salesman, attendant, caretaker, foreman, machinist, labourer, and nine unrecorded. The five women were engaged in house-work.

(e) *Family History.*—In two cases one parent had died of cancer, but in neither case was it cancer of the larynx.

2.—*Symptoms.*

(a) Hoarseness was present in every case and varied in duration from four weeks to fourteen years, the average being eight months, before diagnosis was established.

(b) Difficulty in swallowing was present in thirteen, or forty per cent. of the cases, even before the disease had spread to the pharynx.

(c) Pain, often referred to the ear on the same side, was present in two cases, and was a late symptom.

(d) Cough was an indefinite complaint, noted in eight cases, and was also a late symp-

*Read before the Section of Ophthalmology and Otolaryngology, Academy of Medicine, Toronto, Feb. 9, 1925.

tom, and present in all complicated by pneumonia.

(e) Frothy mucus in the pharynx was complained of in all late cases when growth had extended into the œsophagus or the pharynx.

3.—Findings.

(a) The growth involved the right side in thirteen cases, the left side in ten, both sides in four, and was unrecorded in four.

(b) Fixation was noted in all cases, involving the true cords or arytenoids.

(c) Enlarged, fixed, cervical glands were noted in eleven cases.

(d) Section and microscopic examinations were made in seventeen cases, and in every case epidermoid carcinoma was reported. In one case two sections were made, one from an enlarged arytenoid and the other from the ventricular band on the same side. The former was reported chronic inflammation, and the latter, carcinoma. In the one other case an early section was reported papilloma, while another section, taken a few months later, was carcinomatous.

Two patients, J. N. and E. R., had a positive Wassermann reaction, and were diagnosed syphilis, but, after anti-specific treatment had failed, were shown by section to be malignant.

One case, H. M., diagnosed tuberculous laryngitis and having a history of hoarseness for fourteen years, extensive disintegration of the larynx, definite fibrosis of the lungs, and positive test for tuberculosis, developed a new growth on the left side of the larynx, together with large cervical glands. Section, both from the larynx and the glands, proved to be carcinomatous.

One case, J. D., had a small, hard, ulcerating mass on the soft palate near the base of the uvula on the left side, also a new growth on the posterior two-thirds of the vocal cord on the opposite side. Both growths proved on section to be epidermoid carcinoma. This case is remarkable in that two primary cancerous areas, separate and distinct from each other, on opposite sides of the body, occurred in this patient. Death resulted within three years from the onset.

Treatment.—Unfortunately most of the patients appeared for treatment so late that only two cases were intrinsic, and therefore, considered suitable for operation. One case,

W. D., had a thyrotomy done, the growth, together with the cord from which it grew, was removed. Recovery was uneventful, but this man died suddenly of angina pectoris six months later. Another case, C. H., had a similar operation of thyrotomy, but there was a recurrence within six months, and death resulted from pneumonia two years later.

Of the other patients thirteen had tracheotomy done, and all were palliated by radium needles, deep x-ray, or both. Of the two methods the x-ray seemed to be more helpful, two cases being markedly benefited. One, J. M., who had a mass on the left cord with fixation, and glands in the neck, is still alive and comfortable with less fixation and hoarseness nine months after, and is still under treatment. A similar case, A. M., is also alive and comfortable with no apparent increase in the size of the growth or glands ten months later. As far as can be ascertained at the present time eighteen cases are known to be dead, three are still alive, while the other ten have been lost trace of. Of those who have died the duration of the disease varied from nine months to three years, the average being eighteen months.

Various complications were noted, pneumonia being the commonest and accounting for six deaths. Four cases had a breaking down of the cervical glands with abscess formation, and one of these had an external fistula into the anterior triangle of the neck. One case had three severe hæmorrhages from the pharynx, and finally died of pneumonia.

In summing up several points of interest are noted:—

1.—Prolonged hoarseness in a man over forty should be viewed with great suspicion.

2.—Cancer of the larynx is five times as common in men as in women.

3.—Occupation does not seem to have any influence in causing the disease as only one patient in the series, a salesman, had used his voice excessively.

4.—Heredity does not appear to be a factor as only two cases had relatives die of the disease.

5.—A new growth in the larynx, with fixation of a cord, is strong evidence in favour of malignancy.

5.—Cancer may develop in a syphilitic or tuberculous larynx.

7.—Two primary cancerous growths may develop in the throat of one individual.

8.—Different degrees of malignancy are noted in different persons, being more marked in the younger.

9.—Radium, and deep x-ray have a definite inhibitory action, but no cures have resulted.

10.—Great stress should be placed on early diagnosis before the growth has become extrinsic.

11.—Early section and microscopic examination may be reported papilloma or chronic inflammation, while a later section proves to be carcinoma. The rather indefinite term of "pre-cancerous state" is applied to the former condition.

MATERNAL MORTALITY*

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THE preliminary Report on Vital Statistics for 1924, issued by the Dominion Bureau of Statistics of the Department of Trade and Commerce, Ottawa, on May 26, 1925, states that for the eight provinces which form the registration area for Canada, our maternal mortality was 939 or six per 1,000 living births. The Annual Report of the Provincial Bureau of Health for Quebec for the official year 1923-4 gives the maternal mortality as 326. This makes a total of 1,265, or about twenty-four every week. Twenty-four mothers every week in Canada in 1924 died in childbirth or shortly afterwards.

Inquiries have shown, on the other hand, that many general practitioners in Canada have attended 1,000 births or even 2,000 births or more, and have never lost a mother.

At the conference on Medical Services in Canada, arranged by the Canadian Medical Association, and held at Ottawa in December, 1924, a resolution was passed, asking the Department of Health of Canada to make a comprehensive inquiry into maternal mortality.

A letter asking for advice and help in this inquiry was addressed by the Deputy Minister, Dr. John A. Amyot, on May 25, 1925, to every legally qualified medical practitioner in Canada. Six hundred and fifteen replies to this letter have already been received.

Further information is necessary in regard to our maternal mortality, and it is respectfully submitted to you, Mr. President and members of the Canadian Medical Association, that this

inquiry is thus being made by and for the medical profession and that its success depends on you.

The provincial departments of health and provincial registrars-general have given their cordial co-operation, and a confidential form of enquiry has been prepared, based upon the official certificate for the registration of death.

If the information received from the provincial registrar-general in regard to the death of any woman from fourteen to fifty years of age between July 1, 1925, and June 30, 1926, seems to show that the death in question should possibly be included in this inquiry, a copy of this confidential form with an addressed and franked reply envelope, both enclosed in a sealed envelope, will be mailed to the doctor who signs the certificate of death.

The form looks rather long, but it takes only two minutes and ten seconds to fill it out, as all the questions except the last are to be answered by cancelling the printed word "Yes" or "No" or by inserting a figure. It is hoped that every member of the profession, if and when called upon to do so, will kindly fill out and return this form.

Every year since 1921 we have lost the lives of over 1,200 mothers in Canada from causes connected with childbirth. At least 1,000 of these lives can be saved, if the medical profession can secure the co-operation of the mothers themselves and the fathers, and can educate public opinion.

Filling out the confidential form is the first step, and "C'est le premier pas qui coûte."

*Read at the Annual Meeting of the Canadian Medical Association, Regina, June 26th, 1925.